This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A pharmaceutical composition comprising a liposome associated with at least one polypeptide comprising SEQ ID No : 2 or a polypeptide fragment ~~or analog~~ thereof, wherein said polypeptide is capable of raising antibodies having binding specificity to the polypeptide of SEQ ID NO: 2.

Claim 2 (original): A pharmaceutical composition according to claim 1, wherein said composition comprises a liposome associated with at least one polypeptide comprising SEQ ID No : 2.

Claim 3 (original): A pharmaceutical composition according to claim 1, wherein said composition comprises a liposome associated with at least one polypeptide consisting of SEQ ID No : 2 or a fragment or analog thereof.

Claim 4 (original): A pharmaceutical composition according to claim 1, wherein said composition comprises a liposome associated with at least one polypeptide consisting of SEQ ID No : 2.

Claim 5 (original): A pharmaceutical composition comprising a liposome associated with at least one epitope bearing portion of a polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof.

Claim 6 (original): A pharmaceutical composition according to claim 5, wherein said composition comprises a liposome associated with at least one epitope bearing portion of a polypeptide comprising SEQ ID No : 2.

Claim 7 (currently amended): A pharmaceutical composition comprising a liposome associated with at least one isolated polypeptide, wherein said isolated polypeptide is selected from:

(a) a polypeptide having at least 70% identity ~~to a second polypeptide comprising~~ over its entire length to the polypeptide of SEQ ID No : 2 or a fragment ~~or analog~~ thereof;

(b) a polypeptide having at least 80% identity ~~to a second polypeptide comprising~~ over its entire length to the polypeptide of SEQ ID No : 2 or a fragment ~~or analog~~ thereof;

(c) a polypeptide having at least 95% identity ~~to a second polypeptide comprising~~ over its entire length to the polypeptide of SEQ ID No : 2 or a ~~fragments or analog~~ fragment thereof;

(d) a polypeptide comprising SEQ ID No : 2 or a fragment ~~or analog~~ thereof;

~~(e) a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;~~

~~(f) an epitope bearing portion of a polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;~~

~~(g)~~ (e) the polypeptide of (a), (b), (c), or (d), ~~(e) or (f)~~ wherein the N-terminal Met residue is deleted; and

~~(h)~~ (f) the polypeptide of (a), (b), (c), (d), or (e), ~~(f) or (g)~~ wherein the secretory amino acid sequence is deleted,

wherein each of said polypeptide of (a)-(f) is capable of raising antibodies having binding specificity to the polypeptide of SEQ ID NO: 2.

Claim 8 (currently amended): A pharmaceutical composition according to claim 7, wherein said isolated polypeptide is selected from:

(a) a polypeptide having at least 70% identity ~~to a second polypeptide comprising~~ over its entire length to the polypeptide of SEQ ID No : 2;

(b) a polypeptide having at least 80% identity ~~to a second polypeptide comprising~~ over its entire length to the polypeptide of SEQ ID No : 2;

(c) a polypeptide having at least 95% identity ~~to a second polypeptide comprising~~ over its entire length to the polypeptide of SEQ ID No : 2;

(d) a polypeptide comprising SEQ ID No : 2;

~~(e) a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID No : 2;~~

~~(f) an epitope bearing portion of a polypeptide comprising SEQ ID No : 2;~~

~~(g)~~ (e) the polypeptide of (a), (b), (c), or (d), ~~(e) or (f)~~ wherein the N-terminal Met residue is deleted; and

~~(h)~~ (f) the polypeptide of (a), (b), (c), (d), or (e), ~~(f) or (g)~~ wherein the secretory amino acid sequence is deleted.

Claim 9 (original): A pharmaceutical composition comprising a liposome associated with at least one isolated polynucleotide, wherein said isolated polynucleotide is selected from:

(a) a polynucleotide encoding a polypeptide having at least 70% identity to a second polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;

(b) a polynucleotide encoding a polypeptide having at least 80% identity to a second polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;

(c) a polynucleotide encoding a polypeptide having at least 95% identity to a second polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;

(d) a polynucleotide encoding a polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;

(e) a polynucleotide encoding a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;

(f) a polynucleotide encoding an epitope bearing portion of a polypeptide comprising SEQ ID No : 2 or a fragment or analog thereof;

(g) a polynucleotide comprising SEQ ID No : 1 or a fragment or analog thereof; and

(h) a polynucleotide that is complementary to a polynucleotide in (a), (b), (c), (d), (e), (f) or (g).

Claim 10 (original): A pharmaceutical composition according to claim 9, wherein said isolated polynucleotide is selected from:

(a) a polynucleotide encoding a polypeptide having at least 70% identity to a second polypeptide comprising SEQ ID No : 2;

(b) a polynucleotide encoding a polypeptide having at least 80% identity to a second polypeptide comprising SEQ ID No : 2;

(c) a polynucleotide encoding a polypeptide having at least 95% identity to a second polypeptide comprising SEQ ID No : 2;

(d) a polynucleotide encoding a polypeptide comprising SEQ ID No : 2;

(e) a polynucleotide encoding a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID No : 2;

(f) a polynucleotide encoding an epitope bearing portion of a polypeptide comprising SEQ ID No : 2;

(g) a polynucleotide comprising SEQ ID No : 1 or fragments or analogs thereof; and

(h) a polynucleotide that is complementary to a polynucleotide in (a), (b), (c), (d), (e), (f) or (g).

Claim 11 (currently amended): A pharmaceutical comprising a liposome associated with chimeric polypeptides comprising two or more ~~polypeptides comprising~~ fragments of SEQ ID No : 2 ~~or a fragment or analog thereof~~, wherein said polypeptides are linked as to formed a chimeric polypeptide, wherein said chimeric polypeptide is capable of raising antibodies having binding specificity to the polypeptide of SEQ NO: 2.

Claim 12 (currntly amended): A pharmaceutical composition according to claim ~~10~~ 1, wherein ~~said composition comprises a liposome associated with chimeric polypeptides comprising~~ at least two or more polypeptides ~~comprising SEQ ID No : 2 wherein said polypeptides~~ of claim 1 are linked as to form a chimeric polypeptide.

Claim 13 (previously presented): A pharmaceutical composition according to claim 1, wherein said liposome comprises lipids selected from synthetic phospholipids, bacterial phospholipids and/or cholesterol.

Claim 14 (original): A pharmaceutical composition according to claim 13, wherein said liposome comprises bacterial lipids extracted from E. coli, N. meningitidis, or N. lactamica.

Claim 15 (previously presented): A pharmaceutical composition according to claim 1, wherein said liposome comprises lipids selected from phosphatidyl ethers and esters, glycerides, gangliosides, sphyngomyelin, and steroids.

Claim 16 (original): A pharmaceutical composition according to claim 13, wherein said lipids are selected from:
1,2-Dilauroyl-*sn*-Glycero-3-Phosphate (DLPA),
Dimyristoyl-*sn*-Glycero-3-Phosphate (DMPA),
1,2-Dipalmitoyl-*sn*-Glycero-3-Phosphate (DPPA),
1,2-Distearoyl-*sn*-Glycero-3-Phosphate (DSPA),
1,2-Dioleoyl-*sn*-Glycero-3-Phosphate (DOPA),
1-Palmitoyl-2-Oleoyl-*sn*-Glycero-3-Phosphate (POPA),
1,2-Dilauroyl-*sn*-Glycero-3-Phosphocholine (DLPC),
1,2-Ditridecanoyl-*sn*-Glycero-3-Phosphocholine,
1,2-Dimyristoyl-*sn*-Glycero-3-Phosphocholine (DMPC),
1,2-Dipentadecanoyl-*sn*-Glycero-3-Phosphocholine,
1,2-Dipalmitoyl-*sn*-Glycero-3-Phosphocholine (DPPC),
1,2-Diheptadecanoyl-*sn*-Glycero-3-Phosphocholine,
1,2-Distearoyl-*sn*-Glycero-3-Phosphocholine (DSPC),
1,2-Dimyristoleoyl-*sn*-Glycero-3-Phosphocholine,
1,2-Dipalmitoleoyl-*sn*-Glycero-3-Phosphocholine,
1,2-Dioleoyl-*sn*-Glycero-3-Phosphocholine (DOPC),

1-Myristoyl-2-Palmitoyl-*sn*-Glycero-3-Phosphocholine,
1-Myristoyl-2-Stearoyl-*sn*-Glycero-3-Phosphocholine,
1-Palmitoyl-2-Myristoyl-*sn*-Glycero-3-Phosphocholine,
1-Palmitoyl-2-Stearoyl-*sn*-Glycero-3-Phosphocholine,
1-Palmitoyl-2-Oleoyl-*sn*-Glycero-3-Phosphocholine (POPC),
1-Palmitoyl-2-Linoleoyl-*sn*-Glycero-3-Phosphocholine,
1,2-Dilauroyl-*sn*-Glycero-3-Phosphoethanolamine (DLPE),
1,2-Dimyristoyl-*sn*-Glycero-3-Phosphoethanolamine (DMPE),
1,2-Dipalmitoyl-*sn*-Glycero-3-Phosphoethanolamine (DPPE),
1,2-Dipalmitoleoyl-*sn*-Glycero-3-Phosphoethanolamine,
1,2-Distearoyl-*sn*-Glycero-3-Phosphoethanolamine (DSPE),
1,2-Dioleoyl-*sn*-Glycero-3-Phosphoethanolamine (DOPE),
1-Palmitoyl-2-Oleoyl-*sn*-Glycero-3-Phosphoethanolamine (POPE),
1,2-Dilauroyl-*sn*-Glycero-3-[Phospho-*RAC*-(1-glycerol)] (DLPG),
1,2-Dimyristoyl-*sn*-Glycero-3-[Phospho-*RAC*-(1-glycerol)] (DMPG), 1,2-Dipalmitoyl-*sn*-Glycero-3-[Phospho-*RAC*-(1-glycerol)] (DPPG), 1,2-Distearoyl-*sn*-Glycero-3-[Phospho-*RAC*-(1-glycerol)] (DSPG),
1,2-Dioleoyl-*sn*-Glycero-3-[Phospho-*RAC*-(1-glycerol)] (DOPG),
1-Palmitoyl-2-Oleoyl-*sn*-Glycero-3-[Phospho-*RAC*-(1-glycerol)] (POPG),
1,2-Dilauroyl-*sn*-Glycero-3-[Phospho-L-Serine] (DLPS),
1,2-Dimyristoyl-*sn*-Glycero-3-[Phospho-L-Serine] (DMPS),
1,2-Dipalmitoyl-*sn*-Glycero-3-[Phospho-L-Serine] (DPPS),
1,2-Distearoyl-*sn*-Glycero-3-[Phospho-L-Serine] (DSPS),
1,2-Dioleoyl-*sn*-Glycero-3-[Phospho-L-Serine] (DOPS), and
1-Palmitoyl-2-Oleoyl-*sn*-Glycero-3-[Phospho-L-Serine] (POPS).

Claim 17 (original): A pharmaceutical composition according to claim 13, wherein said liposome further comprises at least oned adjuvant selected from Lipid A, monophosphoryl lipid A (MPLA), lipopolysaccharides, and cytokines.

Claim 18 (original): A pharmaceutical composition according to claim 13, wherein said liposome comprises 0 to 25% cholesterol.

Claim 19 (previously presented): A pharmaceutical composition according to claim 1, wherein said composition further comprises a pharmaceutically acceptable adjuvant.

Claim 20 (previously presented): A method for inducing an immune response against N. meningitidis, in a host, comprising administering to said host an immunogenically effective amount of a pharmaceutical composition according to claim 1 to elicit an immune response.

Claim 21 (previously presented): A method for preventing and/or treating a N. meningitidis infection comprising administering to a host in need thereof a prophylactic or therapeutic amount of a pharmaceutical composition according to claim 1.

Claim 22 (previously presented): A method for preventing and/or treating a neisserial infection selected from N. meningitidis, N. gonorrhoeae, N. lactamica and N. polysaccharea comprising administering to a host in need thereof a prophylactic or therapeutic amount of a pharmaceutical composition according claim 1.

Claim 23 (previously presented): A method for the treatment or prophylaxis of meningitidis and meningoccemia, in a host, comprising administering to said host an effective amount of a pharmaceutical composition according to claim 1.

Claim 24 (previously presented): A method according to claim 20, wherein said host is a mammal.

Claim 25 (original): A method according to claim 24, wherein said host is a human.

Claim 26 (original): A method according to claim 25, wherein said host is an adult human.

Claim 27 (previoulsy presented): A method according to claim 20 wherein said are administered in unit dosage form of about 0.001 to 100 μg/kg (antigen/body weight) with an interval of about 1 to 6 week intervals between immunizations.

Claim 28 (previously presented): A diagnostic method for detecting N. meningitidis organism in a biological sample, comprising:

a) obtaining a biological sample from a host;

b) incubating an antibody or fragment thereof reactive with a pharmaceutical composition according to claim 1 with the biological sample to form a mixture; and

c) detecting specifically bound antibody or bound fragment in the mixture which indicates the presence of N. meningitidis.

Claim 29 (previously presented): A diagnostic method for detecting N. meningitidis organism in a biological sample, comprising:

a) obtaining a biological sample from a host;

b) incubating a pharmaceutical composition according to claim 1 with the biological sample to form a mixture; and

c) detecting specifically bound antigen or bound fragment in the mixture which indicates the presence of antibody specific to N. meningitidis.

Claim 30 (original): A diagnostic method for detecting N. meningitidis organism in a biological sample, comprising:

a) obtaining the biological sample from a host;

b) incubating one or more DNA probes having a DNA sequence encoding a polypeptide comprising SEQ ID No : 2 or a fragment thereof with the biological sample to form a mixture; and

c) detecting specifically bound DNA probe in the mixture which indicates the presence of N. meningitidis bacteria.

Claim 31 (previously presented): A diagnostic method for detecting N. meningitidis in a host comprising:

a) labelling an antibody reactive with a pharmaceutical composition according to claim 1 with a detectable label;

b) administering the labelled antibody to the host; and

c) detecting specifically bound labelled antibody or labelled fragment in the host which indicates the presence of N. meningitidis.

Claim 32 (previously presented): Use of a pharmaceutical method according to claim 1 for the prophylactic or therapeutic treatment of N. meningitidis infection in an individual susceptible to N. meningitidis infection comprising administering to said individual a therapeutic or prophylactic amount of said.

Claim 33 (previously presented): A kit comprising a according to claim 1 for detection of diagnosis of N. meningitidis infection.

Claim 34 (new): A pharmaceutical composition of claim 7, wherein said polypeptide is capable of raising antibodies where are bacteriocidal.

Claim 35 (new): A pharmaceutical composition comprising a liposome associated with at least one isolated polypeptide, wherein said isolated polypeptide is selected from:

(a) a polypeptide having at least 70% identity over its entire length to the polypeptide of SEQ ID No : 2 or a fragment thereof;

(b) a polypeptide having at least 80% identity over its entire length to the polypeptide of SEQ ID No : 2 or a fragment thereof;

(c) a polypeptide having at least 95% identity over its entire length to the polypeptide of SEQ ID No : 2 or a fragment thereof;

(d) a polypeptide comprising SEQ ID No : 2 or a fragment thereof;

(e) the polypeptide of (a), (b), (c), or (d), wherein the N-terminal Met residue is deleted; and

(f) the polypeptide of (a), (b), (c), (d), or (e), wherein the secretory amino acid sequence is deleted,

wherein each of said polypeptide of (a)-(f) is capable of raising antibodies having binding specificity to NspA of serogroups A, B, and C.